

NEW MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 6-13-79			
Company H.N.G. Oil Company				Connection None					
Pool South Shoe Bar				Formation Atoka				Unit	
Completion Date 6-13-79		Total Depth 12,900		Plug Back TD 12,825		Elevation 3980 GL		Farm or Lease Name NM 34 State Com	
Csg. Size 4-1/2	Wt. 13.5	d 17,20	Set At 12,912	Perforations: From 12448 To 12502		Well No. 1			
Tng. Size 2 7/8	Wt. 4.7	d	Set At 11,117	Perforations: From To		Unit Soc. Twp. Rge. F 34 16S 35E			
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single						Packer Set At 11,117		County Lea	
Producing Thru Tubing		Reservoir Temp. °F 193 @ 12475		Mean Annual Temp. °F 68		Baro. Press. - P _a 13.2		State New Mexico	
L 11,117	H 11,117	Gg .649	% CO ₂ .89	% N ₂ None	% H ₂ S None	Prover	Meter Run 3.068	Taps Flange	

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h _w	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	
SI							4370			
1.	3.068		1.50	320	9	88	3875	72		
2.	3.068		1.50	330	24	98	3235	79		
3.	3.068		1.50	330	31	74	2749	83		
4.	3.068		1.50	330	34	50	2143	88		
5.										

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft	Gravity Factor Fg	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	11.13	54.76	333.2	.9741	1.241	1.030	759
2	11.13	90.76	343.2	.9653	1.241	1.027	1243
3	11.13	103.15	343.2	.9868	1.241	1.034	1454
4	11.13	108.02	343.2	1.010	1.241	1.040	1567
5							

NO.	P _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio 18,043 to 1 Mcf/bbl.
1	.50	548	1.46	.942	Specific Gravity of Liquid Hydrocarbons 47.1 Deg.
2	.51	558	1.49	.948	Specific Gravity Separator Gas .649 X X X X X X X X
3	.51	534	1.42	.930	Specific Gravity Flowing Fluid X X X X X
4	.51	510	1.36	.925	Critical Pressure 670 P.S.I.A. P.S.I.A.
5					Critical Temperature 375 R R

P _c 5889.2	P _c ² 34683	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.84$	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.471$
NO.	P _t ²	P _w	P _w ²
1		5335.2	28464
2		4592.2	21088
3		3979.2	15834
4		3205.2	10273
5			

Absolute Open Flow 2139 Mcfd @ 15.025		Angle of Slope θ 57.5	Slope, n .633
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Remarks: PW Substituted for PT measured with Amerada Instrument No. 35745 0-6300#
Element *3rd Rate used for calculations

Approved By Commission:	Conducted By: Pvle	Calculated By: Snruell	Checked By: Pvle
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RECEIVED

JUN 25 1979

**OIL CONSERVATION COMM.
HOBBS, N. M.**